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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,632	02/06/2001	Steven C. Nichols	65001/107/101	4462
128	7590	05/27/2005	EXAMINER	
HONEYWELL INTERNATIONAL INC.			JUNTIMA, NITTAYA	
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P O BOX 2245			PAPER NUMBER	
MORRISTOWN, NJ 07962-2245			2663	

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/777,632

Applicant(s)

NICHOLS, STEVEN C.

Examiner

Nittaya Juntima

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-6 is/are allowed.
- 6) ☐ Claim(s) 1-3 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on 4/30/2004.
2. Claims 4-6 are allowed.
3. Presently claims 1-3 and 8 are rejected under 35 U.S.C. 102(e), and claims 7 and 9 are rejected under 35 U.S.C. 103(a).
4. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Specification

5. The disclosure is objected to because of the following informalities:
 - the status of each U.S. application cited on page 1 should be updated.

Appropriate correction is required.

Claim Objections

6. Claims 9 and 10 are objected to because of the following informalities:
 - in claims 9 and 10, ll 1, "claim 7" should be changed to "claim 8."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1-3 and 8** are rejected under 35 U.S.C. 102(e) as being anticipated by Kishigami et al. (“Kishigami”) (USPN 6,617,057).

Regarding **claim 1**, as shown in Fig. 2, Kishigami teaches:

a) *a priority value generator* (the communication IC 21 having hard logic elements) providing *a high-level signal encoding a value* (priority signal encoding a value, “1111” or “0000”) whose magnitude indicates *a relative priority* (highest priority or lowest priority) (one of hard logic element resides in the communication IC 21 must provide a priority signal encoded with value in order for the data in a frame format shown in Fig. 3 to be transmitted to other nodes, col. 4, ll 20-26 and 57-62, and col. 6, ll 38-39), and

b) *a message priority module* (the communication IC 21 having hard logic elements) receiving *the priority signal* (the priority signal), and storing *the priority value* (the priority value “1111” or “0000”) in *predetermined bits* (priority field of Fig. 3) for *the send register* (a communication unit 20), wherein *the priority value* (the priority value “1111” or “0000” in the PRIORITY field, Fig. 3) is distinct from *the inherent priority of the data identifier* (the data identifier, i.e. MESSAGE ID in Fig. 3, must has an inherent priority of the message, i.e. third tier priority, since its field and value are included in the message format and is used to identify a

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content of a message, col. 4, ll 47-56) which also indicates *a content of the message* (col. 4, ll 47-56),

wherein *the priority value* (the priority value “1111” or “0000” in the PRIORITY field, Fig. 3) is distinct from *the inherent priority of the data identifier* (the value of the MESSAGE ID field, Fig. 3), and

wherein the send register records *a message* (a frame of data to be transmitted shown in Fig. 3 must be recorded in bit format for NRZ encoding) in bit format (Fig. 3) ordered from leading to the trailing bits for sending on *the data path* (a common data bus L) and provides *a message signal encoding the message bit format* (a message encoded with NRZ) (col. 4, ll 20-26, 28-38, and 57-62, and col. 6, ll 38-39).

Regarding **claim 2**, Kishigami teaches that the message priority module stores the priority value in the most significant bits (priority bits in of data frame shown in Fig. 3) of the send register (the communication IC 21 having hard logic elements must store the priority value, “1111” or “0000,” in the priority bits of the communication unit 20 in order to indicate the priority of the frame before transmitting it, col. 4, ll 20-26 and 57-62).

Regarding **claim 3**, Kishigami teaches that each message priority module (each of the communication IC 21) stores a priority value (“1111”) in which *a dominant bit value* (a bit level having a high priority or active level) in a bit position indicates a higher priority in that bit position (the communication IC 21 having hard logic elements must store priority value “1111” in which an active bit value “1” in the first bit position of the priority field indicates a higher priority in that bit position using NRZ encoding, col. 4, ll 20-26, 34-38, and 57-62).

Regarding **claim 8**, Kishigami teaches a method comprising:

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communicating between *the nodes* (nodes 1-n, Fig. 1) on *the serial data path* (a common data bus L, Fig. 1) using dominant and recessive signal levels that form a series of bits organized into messages, wherein a dominant signal level sent on the data path by any of the nodes creates a dominant signal level on the data path irrespective of the number of recessive signal levels sent by other nodes (col. 4, ll 7-38);

for each sending node of the plurality of nodes, sensing the signal level on the data path bit by bit, and if different from that sent by that sending node, halting further sending of signal levels by that sending node (col. 3, ll 8-11, see also col. 1, ll 48-61);

for at least one node of the plurality of nodes, generating *a message* (Fig. 3) that includes *a data identifier field* (MESSAGE ID in Fig. 3) indicating both *a content and an inherent priority of the message* (the data identifier, i.e. MESSAGE ID in Fig. 3, must have an inherent priority of the message since its field and value are included in the message format and is used to identify a content of a message, col. 4, ll 47-56);

generating *a high-level priority value* (the priority value “1111” or “0000” in the PRIORITY field, Fig. 3) indicating a relative message priority that is independent of the inherent priority (col. 4, ll 47-56);

inserting the high-level priority value in a predetermined location of the message (the priority value “1111” or “0000” is inserted in the PRIORITY field, Fig. 3 and col. 4, ll 47-56);
and,

modulating the signal levels on the serial data path to create dominant and recessive signal levels that encode the message in order from leading to trailing bits (col. 4, ll 28-38).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 7 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kishigami et al. ("Kishigami") (USPN 6,617,057) in view of Matsuda et al. ("Matsuda") (USPN 5,293,571).

Regarding **claims 7 and 9**, although Kishigami teaches the message priority module (the communication IC 21 having hard logic elements, Fig. 2), the priority value (the priority value "1111" or "0000" in the PRIORITY field, Fig. 3), and the data identifier (the MESSAGE ID field, Fig. 3), Kishigami fails to teach that the message priority module stores the priority value immediately preceding the data identifier.

However, as shown in Fig. 5, Matsuda teaches that the priority value (a priority PRI) is stored immediately preceding the data identifier (a message ID). See col. 4, ll 35-51.

Therefore, it would have been obvious to one skilled in the art to modify the teaching of Kishigami to include that the message priority module stores the priority value immediately preceding the data identifier as recited in the claim. The motivation/suggestion to do so would have been to transmit the message using a non destructive arbitration type CSMA/CD access method in a format/order as taught by Matsuda (col. 4, ll 57-63 and col. 6, ll 4-23).

Response to Arguments

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11. Applicant's arguments filed 11/22/2004 have been fully considered but they are not persuasive.

In the remarks, regarding claims 1 and 8, the Applicant argues that Kishigami fails to teach a message bit format having a data identifier that indicates both content and an inherent priority of the message and because of the location of the data identifier (MESSAGE ID) shown in Fig. 3, the data identifier of Kishigami cannot act as both a content and inherent priority of the message during bus collisions due to the nature of bitwise arbitration described in the Applicant's Specification.

In response, Kishigami clearly teaches a message bit format (Fig. 3) having a data identifier (MESSAGE ID, Fig. 3, and col. 4, ll 47-56) that indicates both content and an inherent priority of the message (since the data identifier, i.e. MESSAGE ID in Fig. 3, is included in the message format to identify a content of a message, col. 4, ll 47-56, therefore, the MESSAGE ID must have an inherent priority of the message, i.e., *a third tier priority*—similar to Applicant's admission that the MESSAGE LENGTH and DESTINATION ID also act as first and second tier priorities based on their positions in the message, page 8, ll 2-4 of the Remarks/Arguments). Further, it is noted that the features upon which applicant relies (i.e., the data identifier that acts as both a content and inherent priority of the message during bus collisions due to the nature of bitwise arbitration as described in the Applicant's Specification) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the rejections of claims 1 and 8 and the corresponding dependent claims 2-3, 7, and 9 are maintained.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima

May 16, 2005

NT

Ricky Ngo
RICKY NGO
PRIMARY EXAMINER

5/25/05